

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY OPERATING PERMIT

Permit No. 291TVP01B
Application No. 291B

Issue Date: January 31, 2003
Expiration Date: March 1, 2008

The Department of Environmental Conservation (the department), under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the permittee, **Elmendorf Air Force Base**, for the operation of the **Hospital Facility**.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

As set out in AS 46.14.120(c), the permittee shall comply with the terms and conditions of this operating permit.

As requested by **Elmendorf Air Force Base** and pursuant to 18 AAC 50.230(e), upon effective date of this permit, the permittee is no longer required to comply with the terms and conditions of the Pre-Approved Limit Permit No. 291PAL03.

This Operating Permit becomes effective March 2, 2003.

John F. Kuterbach, Manager
Air Permits Program

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List of Abbreviations Used in this Permit

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AS	Alaska Statutes
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
C.F.R.	Code of Federal Regulations
CO	Carbon Monoxide
dscf	Dry standard cubic foot
EPA	US Environmental Protection Agency
gr./dscf	grain per dry standard cubic foot (1 pound = 7000 grains)
GPH	gallons per hour
HAPs or HACs	Hazardous Air Pollutants or Hazardous Air Contaminants [<i>HAPs</i> or <i>HACs</i> as defined in AS 46.14.990(14)]
ID	Source Identification Number
kPa	kiloPascals
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology as defined in 40 C.F.R. 63.
MR&R	Monitoring, Recordkeeping, and Reporting
NESHAPs	Federal National Emission Standards for Hazardous Air Pollutants [<i>NESHAPS</i> as contained in 40 C.F.R. 61 and 63]
NO _x	Nitrogen Oxides
NSPS	Federal New Source Performance Standards [<i>NSPS</i> as contained in 40 C.F.R. 60]
ORL	Owner Requested Limit
O & M	Operation and Maintenance
O ₂	Oxygen
PAL	Pre-Approved Limit
PM-10	Particulate Matter less than ten microns in diameter
ppm, ppmv and ppmvd	Parts per million (by volume on a dry basis)
psia	Pounds per Square Inch (absolute)
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
SIC	Standard Industrial Classification
SO ₂	Sulfur dioxide
TPH	Tons per hour
TPY	Tons per year
VOC	volatile organic compound [<i>VOC</i> as defined in 18 AAC 50.990(103)]
VOL	volatile organic liquid [<i>VOL</i> as defined in 40 C.F.R. 60.111b, Subpart Kb]
vol%	volume percent
wt%	weight percent

Section 1. Identification

Names and Addresses

Permittee:	Elmendorf Air Force Base 3 CES/CEVQ 6326 Arctic Warrior Drive Elmendorf Air Force Base, AK 99506-3240
Facility Name:	Hospital Facility
UTM Coordinates:	2,651,000 ft. N; 1,675,000 ft. E
Physical Address:	5955 Zeamer Avenue Elmendorf Air Force Base, AK 99506-3240
Owner:	Elmendorf Air Force Base
Operator:	3rd Medical Group
Permittee's Responsible Official	Dennis R. Mattson Deputy Base Civil Engineer
Designated Agent:	Paula Fowler 3 CES/CEVQ 6326 Arctic Warrior Drive Elmendorf Air Force Base, AK 99506-3240
Facility and Building Contact:	Paula Fowler (907) 552- 2760 Paula.Fowler@ELMENDORF.af.mil
Fee Contact:	Paula Fowler

Facility Process Description – General Medical and Surgical Hospitals

SIC Code of the Facility: 8062

[18 AAC 50.350(b)(1), 1/18/97]

Section 2. General Emission Information

[18 AAC 50.350(b)(1), 1/18/97]

Emissions of Regulated Air Contaminants, as provided in the permittee's application:

Lead, Nitrogen Dioxide (NO₂), Carbon Monoxide (CO), Sulfur Dioxide (SO₂), Particulate Matter (PM-10), Volatile Organic Compounds (VOCs), Oxides of Nitrogen (NO_x), and Hazardous Air Pollutants (HAPs)

Facility Classifications:

(1) None

Operating Permit Classifications:

(1) 18 AAC 50.325(b)(3)

Section 3. Source Inventory and Description

[18 AAC 50.350(d)(2), 1/18/97]

Sources listed in Table 1 have specific monitoring, record keeping, or reporting conditions in this permit. Source descriptions and ratings are given for identification purposes only.

Table 1 - Source Inventory

ID	Source Name	Source Description	Rating/size	Installation Date
1	Hospital Boiler 1	Cleaver Brooks Boiler (Dual-Fired)	26.8 MMBtu/hr	1996
2	Hospital Boiler 2	Cleaver Brooks Boiler (Dual-Fired)	26.8 MMBtu/hr	1996
3	Hospital Backup Generator 1	Caterpillar 3512 Engine (Diesel/JP8-Fired)	1,000 kW	1996
4	Hospital Backup Generator 2	Caterpillar 3512 Engine (Diesel/JP8-Fired)	1,000 kW	1996
5	Hospital Backup Generator 3	Caterpillar 3512 Engine (Diesel/JP8-Fired)	1,000 kW	1996
6	Hospital Fuel Tank 1	Backup Fuel Storage Tank (Diesel/JP8-Fired)	25,000 gal.	1996
7	Hospital Fuel Tank 2	Backup Fuel Storage Tank (Diesel/JP8-Fired)	25,000 gal.	1996
8	Hospital Fuel Tank 3	Backup Fuel Storage Tank (Diesel/JP8-Fired)	25,000 gal.	1996

Section 4. Emission Fees

- 1. Assessable Emissions.** The permittee shall pay to the department an annual emission fee based on the facility's assessable emissions as determined by the department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410(b). The department will assess fees per ton of each air contaminants that the facility emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of

- 1.1 the facility's assessable potential to emit of 62 TPY from NSPS Source ID(s) 1 and 2; or
- 1.2 the facility's projected annual rate of emissions from NSPS Source ID(s) 1 and 2 that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12 month period approved in writing by the department, when demonstrated by
 - a. an enforceable test method described in 18 AAC 50.220;
 - b. material balance calculations;
 - c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or
 - d. other methods and calculations approved by the department.

[18 AAC 50.346(a)(1), 5/3/02 and 18 AAC 50.350(c) & 50.400 – 50.420, 1/18/97]

- 2. Assessable Emission Estimates.** Emission fees will be assessed as follows:

- 2.1 no later than March 31 of each year, the permittee may submit an estimate of the facility's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the department can verify the estimates; or
- 2.2 If no estimate is received on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in condition 1.1.

[18 AAC 50.346(a)(1), 5/3/02 and 18 AAC 50.350(c) & 50.400 – 50.420, 1/18/97]

Section 5. Source-Specific Requirements

Sources Subject to Federal New Source Performance Standards (NSPS), Subpart A

3. **NSPS Subpart A Notifications.** For any affected facility¹ regulated under NSPS requirements in 40 C. F. R. 60, the permittee shall comply with all applicable notification requirements as provided by 40 CFR 60.7.

[18 AAC 50.040(a)(1), 8/15/02]
[40 C.F.R. 60.7, Subpart A, 7/1/01]

4. **NSPS Subpart A Startup, Shutdown, & Malfunction Requirements.** The permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of Source ID(s) 1 and 2.

[18 AAC 50.040(a)(1), 8/15/02]
[40 C.F.R. 60.7, Subpart A, 7/1/01]

5. **NSPS Subpart A Good Air Pollution Control Practice.** At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate Source ID(s) 1 and 2, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The department will determine whether acceptable operating and maintenance procedures are being used based on information available to the department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspections of Source ID(s) 1 and 2.

[18 AAC 50.040(a)(1), 8/15/02]
[40 C.F.R. 60.11(d), 7/1/01]

6. **NSPS Subpart A Credible Evidence.** For the purpose of submitting compliance certifications or establishing whether or not the permittee has violated or is in violation of the standards set forth in condition 9, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether Source ID(s) 1 and 2 would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[18 AAC 50.040(a)(1); 8/15/02]
[40 C.F.R. 60.11(g), Subpart A, 7/1/01]

7. **NSPS Subpart A Concealment of Emissions.** For Source ID(s) 1 and 2, the permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in condition 9. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[18 AAC 50.040(a)(1), 8/15/02]
[40 C.F.R. 60.12, Subpart A, 7/1/01]

¹ *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 C.F.R. 60.2, effective 7/1/01.

Boiler Units Subject to NSPS Subpart Dc, Source ID(s) 1 and 2

- 8. NSPS Subpart Dc Fuel Consumption.** For each Source ID(s) 1 and 2, the permittee shall record the amounts of each fuel combusted during each day and maintain the records for a period of two years following the date of such record; or monitor according to an EPA approved custom fuel-monitoring schedule.

[18 AAC 50.040(a)(2)(D), 8/15/02]
[40 C.F.R. 60.48c(g) & (i), Subpart Dc, 7/1/01]

For Distillate Fuel Oil combustion:

- 9. NSPS Subpart Dc Sulfur Standards.** At all times, including periods of startup, shutdown, and malfunction, for Source ID(s) 1 and 2, the permittee shall combust fuel oil that contains no more than 0.5 percent sulfur by weight.

[18 AAC 50.040(a)(2)(D), 8/15/02]
[40 C.F.R. 60.42c(d) & (i), Subpart Dc, 7/1/01]

- 9.1 Monitoring - Compliance with the fuel oil sulfur limits shall be determined based on a certification from the fuel supplier.

[18 AAC 50.350(g), 1/18/97]
[40 C.F.R. 60.42c(h) & 44c(h), Subpart Dc, 7/1/01]

- 9.2 Recordkeeping and Reporting - The permittee shall keep records and submit reports to EPA, as follows:

[18 AAC 50.350(h) – (i), 5/3/02]
[40 C.F.R. 60.48c(d), Subpart Dc, 7/1/01]

- a. Fuel supplier certification shall include the following information:

- (i) the name of the oil supplier; and
- (ii) a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c.

[40 C.F.R. 60.48c(f)(1), Subpart Dc, 7/1/01]

- b. Include the calendar dates covered in the reporting period and a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

[40 C.F.R. 60.48c(e)(1) & (11), Subpart Dc, 7/1/01]

- c. The reporting period for the reports required under this condition 9.2 is each six-month period. All reports shall be submitted to EPA and shall be postmarked by the 30th day following the end of the reporting period.

[40 C.F.R. 60.48c(j), Subpart Dc, 7/1/01]

Volatile Organic Liquid Storage Vessels (Tanks) Subject to NSPS Subpart Kb

- 10. NSPS Subpart Kb Requirements (Recordkeeping Only).** For Source ID(s) 6 – 8, the permittee shall keep readily accessible records for the life of the tank showing the dimensions and an analysis showing the capacity of the tank.

[18 AAC 50. 350(h), 5/3/02 & 18 AAC 50.040(a)(2)(M), 8/15/02]
[40 C.F.R. 60.110b(c) and 60.116b(a) & (b), Subpart Kb, 7/1/01]

Section 6. Facility-Wide Requirements

Owner Requested Limit to avoid classification as PSD or as a facility that has the potential to emit 100 tpy of a regulated air contaminant.

11. The permittee shall limit the hours of operation on distillate fuel oil of Source ID(s) 1 - 5 to 1,000 hours per 12 consecutive months for each source.
 - 11.1 Record monthly the number of hours that each source was operating on distillate fuel oil. Add up the 12 consecutive monthly hours of operation on distillate fuel oil of each source.
 - 11.2 Report under condition 16 if any of Source ID(s) 1 - 5 exceeded the operational hour-limit of condition 11.
 - 11.3 Submit the summary of records required by condition 11.1 with the facility operating report required by condition 18.

[18 AAC 50.335(g)(1), 1/18/97 & 18 AAC 50.350(g) - (i), 5/3/02]

Section 7. General Recordkeeping, Reporting, Compliance Certification, and Permit Renewal Requirements

- 12. Certification.** The permittee shall certify all reports, compliance certifications, or other documents submitted to the department and required under the permit by including the signature of a responsible official for the permitted facility following the statement: “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.” Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal. When certifying a compliance certification, the official’s signature must be notarized.

[18 AAC 50.205 and 50.350(b)(3) & (j), 1/18/97; and 18 AAC 50.345(a) & (j), 5/3/02]

- 13. Submittals.** Unless otherwise directed by the department or this permit, the permittee shall send reports, compliance certifications, and other documents required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician.

[18 AAC 50.350(i), 1/18/97]

- 14. Information Requests.** The permittee shall furnish to the department, within a reasonable time, any information the department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the permittee shall furnish to the department copies of records required to be kept by the permit. The department may require the permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.200 & 50.350(b)(3), 1/18/97; and 18 AAC 50.345(a) & (i) & 50.350(g) – (i), 5/3/02]

- 15. Recordkeeping Requirements.** The permittee shall keep all records required by this permit for at least five years after the date of collection, including:

- 15.1 copies of all reports and certifications submitted pursuant to this section of the permit; and
- 15.2 records of all monitoring required by this permit, and information about the monitoring including:
 - a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;
 - b. sampling dates and times of sampling or measurements;
 - c. the operating conditions that existed at the time of sampling or measurement;
 - d. the date analyses were performed;
 - e. the location where samples were taken;

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- f. the company or entity that performed the sampling and analyses;
 - g. the analytical techniques or methods used in the analyses; and
 - h. the results of the analyses.

[18 ACC 50.350(h), 5/3/02]

16. Excess Emissions and Permit Deviation Reports.

16.1 The permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

- a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commences or is discovered, report
 - (i) emissions that present a potential threat to human health or safety; and
 - (ii) excess emissions that the permittee believes to be unavoidable;
- b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard;
- c. report all other excess emissions and permit deviations
 - (i) within 30 days of the end of the month in which the emissions or deviation occurs or is discovered, except as provided in conditions 16.1c(ii);
 - (ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the department provides written permission to report under condition 16.1c(i); and

16.2 When reporting excess emissions, the permittee must report using either the department's online form, which can be found at <http://www.state.ak.us/dec/dawq/aqm/eeform.pdf>, or if the permittee prefers, the form contained in Section 10 of this permit. The permittee must provide all information called for by the form that is used.

16.3 When reporting a permit deviation, the permittee must report using either the department's online form, which can be found at <http://www.state.ak.us/dec/dawq/aqm/eeform.pdf>, or if the permittee prefers, the form contained in Section 10 of this permit. The permittee must provide all information called for by the form.

16.4 If requested by the department, the permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

[18 AAC 50.235(a)(2), 50.240(c), & 50.350(i), 1/18/97; and 18 AAC 50.346(a)(3), 5/3/02]

17. NSPS Reports. The permittee shall:

- 17.1 attach to the facility operating report required by condition 18, copies of any NSPS reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10 as required by condition 9.2; and
- 17.2 upon request by the department, notify and provide a written copy of any EPA-granted waiver of the federal emission standards, record keeping, monitoring, performance testing, or reporting requirements, or approved custom monitoring schedules.

[18 AAC 50.040, 8/15/02 and 18 AAC 350(i)(2), 1/18/97]
[40 C.F.R. 60 & 61, 7/1/01]

18. Operating Reports. During the life of this permit, the permittee shall submit to the department an original and two copies of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

- 18.1 The operating report must include all information required to be in operating reports by other conditions of this permit.
- 18.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under condition 18.1, either
 - a. The permittee shall identify
 - (i) the date of the deviation;
 - (ii) the equipment involved;
 - (iii) the permit condition affected;
 - (iv) a description of the excess emissions or permit deviation; and
 - (v) any corrective action or preventive measures taken and the date of such actions; or
 - b. When excess emissions or permit deviations have already been reported under condition 16 the permittee may cite the date or dates of those reports.

[18 AAC 50.346(b)(3), 5/3/02; 18 AAC 50.350(d)(4), 6/21/98 and 18 AAC 50.350(f)(3) & (i), 1/18/97]

19. Annual Compliance Certification. Each year by March 31, the permittee shall compile and submit to the department an original and two copies of an annual compliance certification report as follows:

[18 AAC 50.350(j), 1/18/97]

- 19.1 For each permit term and condition set forth in Section 4 through Section 7, including terms and conditions for monitoring, reporting, and recordkeeping:

[18 AAC 50.350(d)(4), 6/21/98]

- a. certify the compliance status over the preceding calendar year consistent with the monitoring required by this permit;
- b. state whether compliance is intermittent or continuous;
- c. briefly describe each method used to determine the compliance status; and
- d. notarize the responsible official's signature.

[18 AAC 50.205, 1/18/97 & 50.345(a) & (j), 5/3/02]

19.2 In addition, submit a copy of the report directly to the EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

[18 AAC 50.350(j), 1/18/97]

- 20. Permit Renewal.** To renew this permit, the permittee shall submit an application under 18 AAC 50.335 no sooner than **September 1, 2006** and no later than **September 1, 2007** to renew this permit.

[18 AAC 50.335(a), 1/18/97]

Section 8. Standard Conditions Not Otherwise Included in the Permit

- 21.** The permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for

21.1 an enforcement action;

21.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or

21.3 denial of an operating-permit renewal application.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (c), 5/3/02]

- 22.** It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (d), 5/3/02]

- 23.** Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (e), 5/3/02]

- 24.** Compliance with permit terms and conditions is considered to be compliance with those requirements that are

24.1 included and specifically identified in the permit; or

24.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (b), 5/3/02]

- 25.** The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (f), 5/3/02]

- 26.** The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (g), 5/3/02]

- 27.** The permittee shall allow the department or an inspector authorized by the department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to

27.1 enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;

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- 27.2 have access to and copy any records required by the permit;
 - 27.3 inspect any facility, equipment, practices, or operations regulated by or referenced in the permit; and
 - 27.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(a) & (h), 5/3/02]

Section 9. Permit As Shield from Inapplicable Requirements

In accordance with AS 46.14.290, and based on information supplied in the facility application, this section of the permit contains the requirements determined by the department not to be applicable to the **Hospital Facility**.

28. Table 2 below identifies the sources that are not subject to the specified requirements at the time of permit issuance. If any of the requirements listed in Table 2 becomes applicable during the permit term, the permittee shall comply with such requirements on a timely basis including, but not limited to, providing appropriate notification to EPA, obtaining a construction permit and/or an operating permit revision.

[18 AAC 50.350(l), 1/18/97]

Table 2 - Permit Shields Granted.

Source ID(s)	Non Applicable Requirements	Reason for non-applicability
1 and 2	Particulate Matter (PM) standard under 40 CFR 60.43c, Subpart Dc	Heat input capacity of sources is less than 30 MMBtu/hr.
1 and 2	PM compliance methods and procedures under 40 CFR 60.45c, Subpart Dc	Heat input capacity of sources is less than 30 MMBtu/hr.
1 and 2	Performance test requirements under 40 CFR 60.8, Subpart A	Compliance is demonstrated through supplier certification per 40 CFR 60.42c(h).
6 – 8	All requirements of 40 CFR Subparts A & Kb, except 40 CFR 60.116b(a) & (b), Subpart Kb	Sources are exempted per 40 CFR 60.110b(c).

Section 10. ADEC Notification Form

Fax this form to: (907) 269-7508 Telephone: (907) 269-8888

Elmendorf Air Force Base

Company Name

Hospital Facility

Facility Name

Reason for notification:

☐ **Excess Emissions**

*If you checked this box
Fill out section 1*

☐ **Other Deviation from Permit Condition**

*If you checked this box
fill out section 2*

When did you discover the Excess Emissions or Other Deviation:

Date: __/__/__ Time:__:__

Section 1. Excess Emissions**(a) Event Information (Use 24-hour clock):**

	START Time: (hr:min):	END Time:	Duration
Date: _____	_____:	_____:	_____:
Date: _____	_____:	_____:	_____:
		Total:	_____:

(b) Cause of Event (Check all that apply):

<input type="checkbox"/> START UP	<input type="checkbox"/> UPSET CONDITION	<input type="checkbox"/> CONTROL EQUIPMENT
<input type="checkbox"/> SHUT DOWN	<input type="checkbox"/> SCHEDULED MAINTENANCE	<input type="checkbox"/> OTHER _____

Attach a detailed description of what happened, including the parameters or operating conditions exceeded.

(c) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

(d) Emission Limit Potentially Exceeded

Identify each emission standard potentially exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Identify what observation or data prompted this report. Attach additional sheets as necessary.

Permit Condition	Limit	Emissions Observed
_____	_____	_____
_____	_____	_____

(e) Excess Emission Reduction:

Attach a description of the measures taken to minimize and/or control emissions during the event.

(f) Corrective Actions:

Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

(g) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable?

☐ YES ☐ NO

Do you intend to assert the affirmative defense of 18 AAC 50.235?

☐ YES ☐ NO

Section 2. Other Permit Deviations

(a) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(b) Permit Condition Deviation:

Identify each permit condition deviation or potential deviation. Attach additional sheets as necessary.

Permit Condition	Potential Deviation
_____	_____
_____	_____
_____	_____

(c) Corrective Actions:

Attach a description of actions taken to correct the deviation or potential deviation and to prevent recurrence.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name:

Signature:

Date:

Alaska Department of Environmental Conservation

Air Permits Program

January 31, 2003

Elmendorf Air Force Base

Hospital Facility

STATEMENT OF BASIS

of the terms and conditions for

Permit No. 291TVP01B

Prepared by Grace M. Germain

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. 291TVP01B.

FACILITY IDENTIFICATION

Section 1 of Operating Permit No. 291TVP01B contains information on the facility as provided in the Title V permit application.

The facility is owned and operated by Elmendorf Air Force Base, and Elmendorf Air Force Base is the permittee for the facility's operating permit. The SIC code for this facility is 8062.

The hospital is located on EAFB at 5955 Zeamer Avenue, in the southeast portion of the base. The facility was constructed in phases during the period 1994 – 1998 and serves Department of Defense operations in Alaska and throughout the Pacific region. The hospital is operated by the 3rd Medical Group. The two-story structure occupies approximately 700,000 square feet.

The hospital utilizes natural gas and diesel-fired equipment to supply comfort-heating needs and to drive three emergency backup generators in the event of a power outage. These sources are located at 4974 Zuckert Avenue, in a separate building adjacent to the hospital.

SOURCE INVENTORY AND DESCRIPTION

Table 1 of Operating Permit No. 291TVP01B contains information on the sources regulated by this permit as provided in the application received on May 31, 2002. The table is provided for informational and identification purposes only. Specifically, the source rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

Section 2 of Operating Permit No. 291TVP01B contains emission information as provided in the Title V application. A summary of the potential to emit (PTE)² and assessable PTE as indicated in the application from the Hospital Facility is shown in the table below.

² *Potential to Emit or PTE* means the maximum quantity of a release of an air contaminant, considering a facility's physical or operational design, based on continual operation of all sources within the facility for 24 hours a day, 365 days a year, reduced by the effect of pollution control equipment and approved state or federal limitations on the capacity of the facility's sources or the facility to emit an air contaminant, including the limitations such as restrictions on hours or rate of operation and type or amount of material combusted, stored, or processed...as defined in AS 46.14.990(21), effective 1/18/97.

Table A - Emissions Summary, in Tons Per Year (TPY)

Pollutant	NO _x	CO	PM-10	SO ₂	VOC	Total
PTE	76	32	4	22	3	137
Assessable PTE	27	21	0	14	0	62

The assessable PTE listed under condition 1.1 is the sum of the emissions of each individual regulated air contaminant from NSPS Source ID(s) 1 and 2, for which the facility has the potential to emit quantities greater than 10 TPY. Note 4 of 18 AAC 50.346(a)(1) states that for facilities that only need an operating permit because they have source(s) subject to EPA's NSPS, only the emissions from the source(s) subject to the 'NSPS' emission standards are counted as assessable emissions."

The potential emissions for Source ID(s) 1- 5 as provided in the application were calculated using AP-42 emissions factors. Emissions for both natural gas and diesel fuel were calculated and the worst case of each pollutant was used as the potential to emit. The emissions for diesel fuel were calculated based on the owner-requested limit of 1,000 hours per year for each of Source ID(s) 1 – 5. This limit was requested to reduce emissions below the threshold of 100 tpy of a single regulated air contaminant and therefore classify Elmendorf AFB Hospital as an "NSPS only" facility.

The SO₂ Potential to Emit (PTE) is based on 5 ppm H₂S by volume of the fuel gas. If the fuel sulfur assumption of 5 ppm H₂S is exceeded, then the SO₂ PTE could be exceeded depending on the hours of operation and the rate of fuel consumption.

BASIS FOR REQUIRING AN OPERATING PERMIT

Section 2 includes a description of the regulatory classifications of the EAFB Hospital Facility. The permittee has requested that the department limit operations of its two dual-fueled steam boilers and three diesel-fired generators in order to preclude review under the Prevention of Significant Deterioration (PSD) provisions of the State regulations.

This facility could be classified under 18 AAC 50.300(e) because it is located within 10 kilometers of Anchorage urban area, an area designated as nonattainment for CO, and has the potential to emit more than 100 tpy of the nonattainment air contaminant. However, EAFB requested operational limits in the Hospital Facility to avoid such classification. Without the limits, the facility could emit more than 100 tpy of CO. It requires an operating permit under 18 AAC 50.325(b)(3) because it contains sources subject to one or more of the standards adopted by reference in 18 AAC 50.040(a) – (c).

Alaska regulations require operating permit applications to include identification of "regulated sources." As applied to EAFB Hospital Facility, the State regulations require a description of:

- ⇒ Each source subject to a standard adopted by reference in 18 AAC 50.040 under 18 AAC 50.335(e)(2).

The emission sources at Hospital Facility classified as “regulated sources” according to the above department regulations are listed in Table 1 of Operating Permit No. 291TVP01B.

CURRENT AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

The Elmendorf Air Force Base was issued a permit-to-operate number 9421-AA012 on April 19, 1995. This permit-to-operate included all construction authorizations for the whole Base issued through April 19, 1995, and was issued before January 18, 1997. In an effort to reduce the number of emitting units that must be regulated under Title V, EAFB has elected to divide the Base into independent stationary source groups (facilities) categorized under different SIC codes. This is in accordance with the EPA/DOD guidance memorandum, “Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the Clean Air Act (CAA)” dated August 2, 1996. Each SIC code will be treated as a separate facility carrying its own individual air quality permit terms and conditions.

On January 22, 2001, the Hospital Facility was granted a Pre-Approved Limit permit number 291PAL03 effective May 22, 1998. This Pre-Approved Limit includes diesel fuel usage limit on diesel-burning sources in the facility, and associated terms and conditions to limit NO_x emissions from the facility to avoid PSD classification of EAFB.

Construction Permits

No construction permits have been issued for this facility after January 18, 1997 (the effective date of the new divided operating and construction-permitting program).

Title V Operating Permit Application History

The owner or operator submitted an application on December 8, 1997 that included base-wide source emissions information. On May 1, 1998, ADEC received an updated application.

On January 22, 2001, the owner or operator was granted a Pre-Approved Limit permit number 291PAL03 for the Hospital facility to limit NO_x emissions.

On May 31, 2002, the department received an application for an operating permit for the Hospital facility after determining that the facility contains sources that are subject to NSPS.

COMPLIANCE HISTORY

The facility has operated at its current location since 1996. Review of the permit files for this facility, which includes the past inspection reports indicate a facility generally operating in compliance with its PAL permit. However, the permittee failed to obtain a construction permit or PSD avoidance limits in 1996 for the addition of sources, Source ID(s) 1, 2 and 6 – 8, subject to NSPS requirements.

FACILITY-SPECIFIC REQUIREMENTS CARRIED FORWARD

In accordance with 18 AAC 50.230(e), a pre-approved limit (PAL) granted to an owner or operator of a facility may be terminated upon request by notifying the department in writing. EAFB was previously issued 291PAL03 effective May 22, 1998 for the diesel-fired sources used in the Hospital facility. On May 31, 2002, EAFB submitted an application to the department for an operating permit after determining that Source ID(s) 1, 2, and 6 – 8 are subject to NSPS and therefore subject to operating permit requirements. This operating permit, 291TVP01B, supersedes 291PAL03. Table C below shows the condition in 291PAL03 that established the limit for diesel fuel usage and how it was changed in the new condition in Operating Permit No. 291TVP01B.

Table C - Comparison of Pre-January 18, 1997 Permit No. 291PAL03 Conditions to Operating Permit No. 291TVP01B Conditions³

Permit No. 291PAL03 Condition	Description of Requirement	Permit No. 291TVP01B Condition Number	How condition was revised
Pre-approved limit (PAL) for diesel fuel usage	100,859 gallons per year	11	Different format. 291PAL03 superseded by Operating Permit No. 291TVP01B. ORL for Source ID(s) 1 – 5 to 1,000 hours operation on distillate fuel per 12 consecutive month per source. Permit terms and conditions include all affected sources in the hospital facility (SIC code 80).

³ This table does not include all standard and general conditions

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The state and federal regulations for each condition are cited in Operating Permit No. 291TVP01B.

Conditions 1 – 2, Emission Fees

Applicability: The regulations require all permits to include due dates for the payment of fees and any method the permittee may use to re-compute assessable emissions.

Factual Basis: These standard conditions require the permittee to pay fees in accordance with the department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date. According to note number 4 of 18 AAC 50.346(a)(1), "... only the emissions from the source subject to the 'NSPS' emission standards are counted as assessable emissions."

The PTE set forth in the condition is based on 0.5 percent by weight sulfur content and 1,000 hours ORL for distillate fuel; and sulfur content of 5 ppm H₂S by volume in natural gas fuel. If the actual sulfur content of the fuel is greater than these assumptions, the assessable emissions calculations provided by the permittee should reflect the actual sulfur content. The change in these values may result in SO₂ emissions that could trigger PSD.

Condition 3 – 6, NSPS Subpart A Requirements

Applicability The department has incorporated by reference the NSPS effective July 1, 2001, for specific industrial activities, as listed in 18 AAC 50.040⁴.

Most (with the exception of some storage tanks) sources subject to an NSPS are subject to Subpart A. At this facility, Source ID(s) 1 and 2 are subject to NSPS Subpart Dc and therefore subject to Subpart A.

Condition 3- The permittee has already complied with the notification requirements in 40 C.F.R. 60.7 for Source ID(s) 1 and 2. However, the permittee is still subject to these requirements in the event of a new NSPS source or reconstruction of one of these sources.

Condition 4 - Start-up, shutdown, or malfunction record maintenance requirements in 40 C.F.R. 60.7(b) are applicable to all NSPS sources subject to Subpart A.

Condition 5- Good air pollution control practices in 40 C.F.R. 60.11 are applicable to all NSPS sources subject to Subpart A (Source ID(s) 1 and 2).

Condition 6 states that any credible evidence may be used to demonstrate compliance or establishing violations of relevant NSPS standards for Source ID(s) 1 and 2.

Condition 7 - Concealment of emissions prohibitions in 40 C.F. R. 60.12 are applicable to Source ID(s) 1 and 2.

⁴ EPA has not delegated to the department the authority to administer the NSPS program as of the issue date of this permit.

Factual Basis: Subpart A contains the general requirements applicable to all affected facilities (sources) subject to NSPS. In general the intent of NSPS is to provide technology-based emission control standards.

Condition 8, NSPS Subpart Dc Fuel Consumption Requirements

Applicability: NSPS Subpart Dc applies to steam generating units for which construction, modification, or reconstruction commenced after June 9, 1989 and have maximum design heat input capacities of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). Source ID(s) 1 and 2 were installed in 1996, have maximum design heat input capacities of 26.8 MMBtu/hr and are therefore subject to Subpart Dc.

Source ID(s) 1 and 2, when burning only natural gas, are not subject to the SO₂ standard in 40 C.F.R. 60.42c or the PM standard in 40 C.F.R. 60.43c. However, whether burning natural gas or distillate fuel, the sources are subject to fuel consumption requirements described in condition 8.

Factual Basis: The conditions require the permittee to comply with the Subpart Dc fuel consumption monitoring requirements of 40 CFR 60.48c(g) or an EPA approved custom fuel-monitoring schedule.

Condition 9, NSPS Subpart Dc Requirements

Applicability: NSPS Subpart Dc applies to steam generating units for which construction, modification, or reconstruction commenced after June 9, 1989 and have maximum design heat input capacities of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). Source ID(s) 1 and 2 were installed in 1996, have maximum design heat input capacities of 26.8 MMBtu/hr; and are therefore subject to Subpart Dc.

Source ID(s) 1 and 2, when burning distillate fuel oil, are subject to the standard for SO₂ in 40 C.F.R. 60.42c(d). Source ID(s) 1 and 2 are not subject to the PM standard in 40 C.F.R. 60.43c because the sources' maximum design heat input is less than 30 MMBtu/hr. In accordance with 40 CFR 60.42c(h)(1), compliance with the emission limit or oil sulfur content limit for Source ID(s) 1 and 2 may be demonstrated by certification from the fuel supplier.

Factual Basis: The condition requires the permittee to comply with Subpart Dc sulfur dioxide standard. The permittee may not cause or allow Source ID(s) 1 and 2 to violate this standard. The permittee has two options, one is to comply with a sulfur dioxide emission limit and the other is to comply with a fuel sulfur content limit. The permittee has chosen to comply with the fuel sulfur content limit.

MR&R - The conditions describe monitoring, recordkeeping and reporting required in the event that the owner seeks to demonstrate compliance with the SO₂ standard based on fuel supplier certification.

Condition 10, NSPS Subpart Kb Requirements (Recordkeeping Only)

Applicability: NSPS Subpart Kb applies to sources that were built or modified after July 23, 1984. Source ID(s) 6 – 8 were built in 1996. Source ID(s) 6 - 8 have storage capacities of 25,000 gallons (94.6 m³) and store volatile organic liquids (VOLs) with maximum true vapor pressure of less than 1kPa. In accordance with 40 CFR 60.110b(c), tanks with storage capacities ≥ 75 m³ but < 151 m³ (between 20,000 to 40,000 gallons) storing a VOL with a maximum true vapor pressure of < 15.0 kPa (2.2 psia) are subject to **only** the recordkeeping requirements in Subpart Kb (40 C.F.R. 60.116b(a) & (b)).

Factual Basis: This condition incorporates Subpart Kb recordkeeping requirements. Because the condition is a permanent recordkeeping condition, no monitoring or reporting is required to ensure compliance with these federal requirements.

Conditions 11, Owner Requested Limits

Applicability: Implementation of these operating limits will ensure that facility-wide CO emissions will remain below 100 TPY.

Factual Basis: The permittee has requested that the department limit the hours of operation on diesel fuel oil of its two dual-fueled steam boilers and three backup generators to 1,000 hours per consecutive 12-month period per source in order to avoid PSD or major facility classification. Without the limits the facility would be classified under 18 AAC 50.300(e) as major facility near a nonattainment area.

Condition 12, Certification

Applicability: This is a standard condition to be included in all permits. Applies because every permit requires the permittee to submit reports.

Factual Basis: This condition requires the permittee to certify all reports submitted to the department. To ease the certification burden on the permittee, the condition allows the excess emission reports to be **certified** with the facility report, even though it must still be **submitted** more frequently than the facility operating report. This condition supplements the reporting requirements of this permit.

Condition 13, Submittals

Applicability: Applies because the permittee is required to send reports to the department.

Factual Basis: This condition requires the permittee to send submittals to the address specified in this condition. Receipt of the submittal at the correct department office is sufficient monitoring for this condition. This condition supplements the reporting requirements of this permit.

Condition 14, Information Requests

Applicability: Applies to all permittees, and incorporates a standard condition.

Factual Basis: This condition incorporates a standard condition in regulation, which requires the permittee to submit information requested by the department. Receipt of the requested information is adequate monitoring.

Condition 15, Recordkeeping Requirements

Applicability: Applies because the permittee is required by the permit to keep records.

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide an evidence of compliance with this requirement.

Condition 16, Excess Emission and Permit Deviation Reports

Applicability: Applies when the emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions - the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The reports themselves and the other monitoring records required under this permit provide monitoring of whether the permittee has complied with the condition. Please note that there may be additional federally required excess emission reporting requirements.

Condition 17, NSPS Reports

Applicability: Applies to facilities subject to NSPS federal regulations.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60. The reports themselves provide monitoring for compliance with this condition.

Condition 18, Operating Reports

Applicability: Applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit. The reports themselves provide monitoring for compliance with this condition.

Condition 19, Annual Compliance Certification

Applicability: Applies to all permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. The reports themselves provide monitoring for compliance with this condition.

Condition 20, Permit Renewal

Applicability: Applies if the permittee intends to renew the permit.

Factual Basis: The permittee is required to submit an application for permit renewal by the specific dates applicable to Hospital Facility as listed in this condition. Monitoring, recordkeeping, and reporting for this condition consist of the application submittal.

Conditions 21 - 27, Standard Conditions

Applicability: Applies because these are standard conditions to be included in all permits.

Factual Basis: These are standard conditions required for all operating permits.

Condition 28, Permit Shield

Applicability Applies because the permittee has requested a shield for the applicable requirements listed under this condition.

Factual Basis: Table 2 of Operating Permit No. 291TVP01B shows the permit shields that the department granted to the permittee. The department based the determinations on the permit application, past operating permit, construction permits and inspection reports.